INTERNATIONAL SEARCH REPORT

Internation No PCT/US2004/023498

| A CLASSIE | ECATION OF SUBJECT MATTER | | | | | |
|---|---|---|-----------------------|--|--|--|
| IPC 7 | A61K31/7084 A61P1/12 A61P31/04 | 4 A61P31/02 | | | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | | | | | |
| B. FIELDS | | ion and IPC | | | | |
| | cumentation searched (classification system followed by classification | n symbols) | | | | |
| IPC 7 A61K | | | | | | |
| Documentat | ion searched other than minimum documentation to the extent that su | ch documents are included in the fields se | arched | | | |
| | | | | | | |
| Electronic da | ata base consulted during the international search (name of data base | e and, where practical, search terms used | | | | |
| EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ | | | | | | |
| C. DOCUME | ENTS CONSIDERED TO BE RELEVANT | | | | | |
| Category ° | Citation of document, with indication, where appropriate, of the rele | vant passages | Relevant to claim No. | | | |
| P,A | RASHID MOHAMMED H ET AL: "Identi of genes involved in the switch be the smooth and rugose phenotypes cholerae." FEMS MICROBIOLOGY LETTERS, vol. 227, no. 1, 6 September 2003 (2003-09-06), pa 113-119, XP002322846 ISSN: 0378-1097 abstract page 113, right-hand column, parapage 118, left-hand column, parapage 118, right-hand column, para | etween of Vibrio ges graph 2 raph 2 | 1-27 | | | |
| X Furt | her documents are listed in the continuation of box C. | Patent family members are listed | in annex. | | | |
| | ategories of cited documents: | | | | | |
| | ent defining the general state of the art which is not | "T" later document published after the Inte- or priority date and not in conflict with | the application but | | | |
| consid | dered to be of particular relevance | cited to understand the principle or th invention | | | | |
| fling date "L* document which may throw doubts on priority claim(s) or | | 'X' document of particular relevance; the considered novel or canno | t be considered to | | | |
| which | le alted to cotablish the publication data of another | involve an inventive step when the do "Y" document of particular relevance; the | claimed invention | | | |
| O docum | **Control of the special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled | | | | | |
| *P* docum | ent published prior to the international filing date but | in the art. *&* document member of the same patent | • | | | |
| Date of the | actual completion of the international search | Date of mailing of the international sea | | | | |
| 1 April 2005 | | 11/04/2005 | | | | |
| Name and mailing address of the ISA | | Authorized officer | | | | |
| | European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. | | | | | |
| Fax: (+31-70) 340-2040, 1X. 31 651 epo ni, | | Hars, J | | | | |

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/023498

| DOX | NO. I | ructionate aria/or amino acid sequence(s) (Continuation of item 1.5 of the first sheet) |
|-----|-------|---|
| 1. | With | regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ntion, the international search was carried out on the basis of: |
| | a. | type of material |
| | | X a sequence listing |
| | | table(s) related to the sequence listing |
| | b. | format of material |
| | | X in written format |
| | | X in computer readable form |
| | c. | time of filing/furnishing |
| | | X contained in the International application as filed |
| | | filed together with the international application in computer readable form |
| | | furnished subsequently to this Authority for the purpose of search |
| 2. | | In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| 3. | Addi | itional comments: |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| l | | |

INTERNATIONAL SEARCH REPORT

Internal Application No PCT/US2004/023498

| | | PCT/US2004/023498 | | |
|------------|---|-----------------------|--|--|
| | Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | |
| P,A | JENAL URS: "Cyclic di-guanosine-monophosphate comes of age: a novel secondary messenger involved in modulating cell surface structures in bacteria?" CURRENT OPINION IN MICROBIOLOGY, vol. 7, no. 2, 2 March 2004 (2004-03-02), pages 185-191, XP002322847 ISSN: 1369-5274 cited in the application abstract page 189, right-hand column, last paragraph | 1-27 | | |
| A | GALPERIN MICHAEL Y ET AL: "Novel domains of the prokaryotic two-component signal transduction systems" FEMS MICROBIOLOGY LETTERS, vol. 203, no. 1, 11 September 2001 (2001-09-11), pages 11-21, XP002322854 ISSN: 0378-1097 cited in the application abstract table 1 | 1-27 | | |

International application No. PCT/US2004/023498

INTERNATIONAL SEARCH REPORT

| Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) | | | |
|--|--|--|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: | | | |
| 1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: | | | |
| Although claims $1-16,20$ are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition. | | | |
| Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: | | | |
| | | | |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). | | | |
| Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet) | | | |
| This International Searching Authority found multiple inventions in this international application, as follows: | | | |
| | | | |
| | | | |
| | | | |
| As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims. | | | |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. | | | |
| 3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report | | | |
| covers only those claims for which fees were paid, specifically claims Nos.: | | | |
| | | | |
| | | | |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: | | | |
| | | | |
| | | | |
| Samuel or Brakes | | | |
| Remark on Protest The additional search fees were accompanied by the applicant's protest. | | | |
| No protest accompanied the payment of additional search fees. | | | |
| | | | |